

## **OCA Event Timer**

*E. Samain<sup>1</sup>, Jean Marie Torre<sup>1</sup>, Ph. Guillemot<sup>2</sup>, S. Leon<sup>2</sup>, I. Petitbon<sup>2</sup>, P. Vrancken<sup>1</sup>  
etienne.samain@obs-azur.fr*

*<sup>1</sup> Observatoire. de la Côte d'Azur, France*

*<sup>2</sup> CNES, France*

The Event Timer A032-ET provides the extremely high precision characteristics, which exact determination in commonly accepted way is impossible or, at least, very difficult. For example, the comparison method will require reference instruments with much higher certified precision characteristics. There are only a few such instruments in the world and they are accessible only in exceptional cases. For this reason, the special method had been developed for the reliable characterization of each manufactured A032-ET device.

In this report, the particular methods and means for the experimental evaluation and specification of the offset drift in time and temperature, non-linearity dependence on measured time intervals, and single-shot RMS resolution are considered. It should be noted that, although these methods are applied in connection with testing of A032-ET devices, they also can be used for other event timers testing with similar architecture.